

Docket No. PRD 2033 NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Apodaca et al.

Serial No. : 10/690,115 Art Unit:

Filed : October 21, 2003 Examiner:

For : PIPERAZINYL AND DIAZAPANYL BENZAMIDES AND BENZTHIOAMIDES

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January 27, 2004

(Date of Deposit)

John W. Harbour

(Name of applicant, assignee, or Registered Representative)

 (Signature)

January 27, 2003

(Date of Signature)

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

Applicant(s) reserve(s) the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this

information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist.

In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified national application (other than a continued prosecution application under §1.53(d)), within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of a request for continued examination under §1.114, no additional fee is required.

In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with  the first or  second After Final Submission, therefore:

- Statement in Accordance with §1.97(e)  
(attached); or
- Please charge Deposit Account No. 10-0750/ / the fee of \$180.00 as set forth in §1.17(p).

In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, or an action that otherwise closes prosecution and that it is accompanied by one of:

- Statement in Accordance with §1.97(e)  
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- Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
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- In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
  - If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.
  - Copies of only foreign patent documents and non-patent literature are enclosed in accordance with 37 CFR 1.98 (a)(2). (The U.S. patents and each U.S. patent application publication listed on the attached Form PTO-1449 are not

enclosed because this U.S. patent application was filed after June 30, 2003 or this international application has entered the national stage under 35 USC §371 after June 30, 2003 (see USPTO waiver of requirement under 37 CFR 1.98 (a) (2) (i)).

There are no listed references which are not in the English language.

The relevance of those listed references which are not in the English language is as follows:

Attached are copies of search report(s) from corresponding patent application(s), which are listed on the attached Submission Under MPEP 609 D.

Attached are the following non-published pending patent applications which may be deemed relevant, which are listed on the attached Submission Under MPEP 609 D.

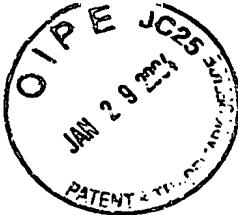
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Respectfully submitted,



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DATED: January 27, 2004



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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

<i>Application Number</i>	10/690,115
<i>Filing Date</i>	October 21, 2003
<i>First Named Inventor</i>	Richard Apodaca
<i>Group Art Unit</i>	
<i>Examiner Name</i>	
<i>Attorney Docket Number</i>	PRD 2033 NP

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear
		Number	Kind Code <sup>2</sup>			
		USPN 3,886,160		Tweit, Robert C.	05-27-1975	
		USPN 3,714,179		Tweit, Robert C.	01-30-1973	
		USPN 5,030,644		Baldwin et al.	07-09-1991	
		USPN 5,217,986		Pomponi, S.A. et al.	06-08-1993	
		USPN 5,352,707		Pomponi, S.A. et al.	10-04-1994	
		USPN 5,869,479		Kreutner, W.; Hey, J.A.	02-09-1999	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	KindCode <sup>5</sup>				
✓	WO	99/42458			James Black Foundation Limited	08-26-1999		
✓	EP	0978512	A1		Societe Civile Bioprojet	02-09-2000		
✓	JP	02306237	A2		Kato et al.	12-19-1990		
✓	WO	02/076925	A2		Eli Lilly and Company	10-03-2002		
✓	WO	03/050099	A1		Ortho-McNeil Pharmaceutical, Inc.	06-19-2003		
✓	WO	02/024695	A2		Ortho-McNeil Pharmaceutical, Inc.	03-28-2002		
✓	WO	02/012214	A2		Ortho-McNeil Pharmaceutical, Inc.	02-14-2002		
✓	WO	02/012190	A2		Ortho-McNeil Pharmaceutical, Inc.	02-14-2002		
✓	WO	03/064411	A1		Novo Nordisk	08-07-2003		
✓	WO	03/031432	A1		Novo Nordisk	04-17-2003		
✓	WO	03/024929	A1		Novo Nordisk	03-27-2003		
✓	WO	03/004480	A2		Novo Nordisk	01-16-2003		
✓	WO	03/024928	A2		Novo Nordisk	03/27/2003		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

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<i>Filing Date</i>	October 21, 2003
<i>First Named Inventor</i>	Richard Apodaca
<i>Group Art Unit</i>	
<i>Examiner Name</i>	
<i>Attorney Docket Number</i>	PRD 2033 NP

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITOL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	✓	ALBENGRES, E. et al. Systemic Antifungal Agents. <i>Drug Safety</i> (Feb. 1998) 18(2):83-97	
	✓	ALI, S.M. et al. Design, Synthesis, and Structure-Activity Relationships of Acetylene-Based Histamine H3 Receptor Antagonists. <i>J. Med. Chem.</i> (1999) 42(5):903-909	
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	✓	BLACK, J.W. et al. Definition and Antagonism of Histamine H2-Receptors. <i>Nature</i> (April 1972) 236:385-390	
	✓	DING, Y.-S. et al. Synthesis of High Specific Activity (+)- and (-)-6-[18F]Fluoronorepinephrine via the Nucleophilic Aromatic Substitution Reaction. <i>J. Med. Chem.</i> (1991) 34(2):767-771	
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✓	YOKOYAMA, H. et al.	Effect of Thioperamide, a Histamine H3 Receptor Antagonist, on Electrically Induced Convulsions in Mice. Eur. J. Pharmacol. (1993) 234:129-133	
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✓	IEMURA, R. et al.	Synthesis of Benzimidazole Derivatives as Potential H1-Antihistaminic Agents. J. Heterocycl. Chem. (1987) 24:31-37	
✓	IWATA, R. et al.	Synthesis of 3-[1H-Imidazol-4-yl]propyl 4-[ <sup>18</sup> F]fluorobenzyl Ether ([ <sup>18</sup> F]Fluoroproxyfan): A Potential Radioligand for Imaging Histamine H3 Receptors. J. Labelled Compd. Radiopharm. (2000) 43:873-882	
✓	JAROSINSKI, M.A.; ANDERSON, W.K.	Preparation of Noncondensed 2-Substituted 1-Methylimidazoles via Ipsso Substitution Reaction on 2-Sulfinyl or 2-Sulfonyl Derivatives of 4,5-Disubstituted 1-Methylimidazoles. J. Org. Chem. (1991) 56(12):4058-4062	
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✓	PHILLIPS, B.T. et al.	Preparation of 5-Substituted 2-Mercapto-1-methylimidazoles. Direct Metalation of 2-Mercapto-1-methylimidazole. Synthesis (1990) :761-763	
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✓	ERDELYI, M.; GOGOLL, A.	Rapid Homogeneous-Phase Sonogashira Coupling Reactions Using Controlled Microwave Heating. J. Org. Chem. (2001) 66(12):4165-4169	
✓	APODACA, R. et al.	A New Class of Diamine-based Histamine H3 Receptor Antagonists: 4-(Aminoalkoxy)benzylamines. J. Med. Chem. (2003) 46(18):3938-3944	
✓	STARK, H.	Recent Advances in Histamine H3/H4 Receptor Ligands. Expert Opin. Ther. Patents (2003) 13(6):851-865	
✓		Phenylalkynes to Treat Histamine-Mediated Conditions. Expert Opin. Ther. Patents (2003) 13(11):1759-1762	

Examiner Signature		Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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